



# UNITED STATES PATENT AND TRADEMARK OFFICE

mn

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,276	04/12/2004	Mohamed Sadek	MS305627.01/40062.228US01	4562
27488	7590	06/22/2007		
MERCHANT & GOULD (MICROSOFT)			EXAMINER	
P.O. BOX 2903			ABDUL-ALI, OMAR R	
MINNEAPOLIS, MN 55402-0903				
			ART UNIT	PAPER NUMBER
			2178	
			MAIL DATE	DELIVERY MODE
			06/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/823,276	Applicant(s) SADEK ET AL.	
	Examiner Omar Abdul-Ali	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/12/2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The following action is in response to the original filing of April 12, 2004. Claims 1-20 are pending and have been considered below.

#### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 17-20 are drawn to a machine-readable medium, which the applicant has defined in the specification (page 6, lines 26-31) to encompass a carrier wave. The Office considers a carrier wave to be a form of energy. Energy is not a series of steps or acts and this is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore not a compilation of matter. Thus, a carrier wave does not fall within any of the four categories of invention. Therefore, Claims 17-20 are not statutory.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2178

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being obvious over Horvitz et al. (US 5,880,733) in view of Miller (US 6,597,358).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claims 1 and 17: Horvitz discloses a system and method for redirection of transformed windows, comprising:

a. determining a bounding rectangle bounding the window transformed by the transformation matrix (column 5, lines 1-7);

b. determining whether the input device point is within the bounding rectangle (column 5, lines 8-18);

Horvitz does not explicitly disclose performing an inverse transformation on the input device location point if the input device point is within the bounding rectangle.

Miller discloses a similar method and apparatus for redirection of transformed windows that further discloses bi-directional mappings of 2D and 3D coordinate spaces and translating manipulations of 3D windows into 2D commands (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to perform an inverse transformation on the input device location point if the input device point is within the bounding rectangle in Horvitz. One would have been motivated to perform an inverse transformation on the input device location point to allow the application to receive the mouse input in the 3D coordinate space and behave as if it was manipulated in a 2D coordinate space.

Claims 2 and 18: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claims 1 and 17 above, and Horvitz further discloses determining whether the input device point is within a new frame region within the bounding rectangle (column 5, lines 1-18).

Horvitz does not explicitly disclose performing the inverse transformation on the input device location point only if the input device point is within the new frame region within the bounding rectangle. However Horvitz does disclose tracking the position of

Art Unit: 2178

the mouse cursor in the 3D coordinate space (column 5, lines 8-18), and Miller discloses bi-directional mappings of 2D and 3D coordinate spaces and translating manipulations of 3D windows into 2D commands (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the inverse transformation on the input device location point only if the input device point is within the new frame region within the bounding rectangle in Horvitz. One would have been motivated to perform the inverse transformation on the input device location point only if the input device point is within the new frame region within the bounding rectangle in order to allow the application to process mouse input on transformed windows in the 3D coordinate space.

Claim 3: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 2 above, and Horvitz further discloses the new frame region is the bounding rectangle and is defined by a pair of triangles (column 5, lines 8-18).

Claim 4: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 3 above, and Horvitz further discloses:

- a. using the transform matrix to map the two triangles into transformed space (column 5, lines 1-18);
- b. determining whether the input device point is within one of the two triangles (column 5, lines 1-18).

Art Unit: 2178

Claim 5: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 1 above, and Horvitz further discloses the input location point is a mouse input point (column 5, lines 8-18).

Claim 6: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 1 above, and Miller further discloses the inverse transformation converts the input device location point to window logical coordinate space for transmission to the application (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to convert the input device location point in Horvitz. One would have been motivated to convert the input device location point to window logical coordinate space in order to allow the application to receive the mouse input in the 3D coordinate space and behave as if it was manipulated in a 2D coordinate space.

Claim 7: Horvitz discloses a system and method for redirection of transformed windows, comprising:

- a. receiving the input device message from the input device at an input device location point on the display (column 5, lines 1-18);
- b. determining whether the location point is within the transformed window (column 5, lines 1-18);
- c. communicating the device message to the application (column 5, lines 1-18);

Art Unit: 2178

Horvitz does not explicitly disclose if the location point is within the transformed window, performing an inverse transform on the location point into its logical coordinate system. Miller discloses a similar method and apparatus for redirection of transformed windows that further discloses bi-directional mappings of 2D and 3D coordinate spaces and translating manipulations of 3D windows into 2D commands (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to perform an inverse transform on the location device location point if it is within the transformed window in Horvitz. One would have been motivated to perform the inverse transformation on the input device location point if the input device point is within the transformed window in order to allow the application to receive the mouse input in the 3D coordinate space and behave as if it was manipulated in a 2D coordinate space.

Claim 8: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 7 above, and Horvitz further discloses:

a. determining whether the input device point is within a bounding rectangle bounding the transformed window (column 5, lines 8-18);

Horvitz does not explicitly disclose performing the inverse transformation on the input device location point is within the bounding rectangle, however Miller discloses bi-directional mappings of 2D and 3D coordinate spaces and translating manipulations of 3D windows into 2D commands (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the



Art Unit: 2178

invention was made to perform an inverse transform on the input device location point in Horvitz. One would have been motivated to perform the inverse transformation on the input device location point if the input device point is within the bounding rectangle in order to allow the application to receive the mouse input in the 3D coordinate space and behave as if it was manipulated in a 2D coordinate space.

Claim 9: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 7 above, and Horvitz further discloses:

a. determining whether the input device point is within the new frame region within the bounding rectangle (column 5, lines 1-18);

Horvitz does not explicitly disclose performing the inverse transformation on the input device location point only if the input device point is within the new frame region within the bounding rectangle. However Horvitz does disclose tracking the position of the mouse cursor in the 3D coordinate space (column 5, lines 8-18), and Miller discloses bi-directional mappings of 2D and 3D coordinate spaces and translating manipulations of 3D windows into 2D commands (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the inverse transformation on the input device location point only if the input device point is within the new frame region within the bounding rectangle in Horvitz. One would have been motivated to perform the inverse transformation on the input device location point only if the input device point is within

Art Unit: 2178

the new frame region within the bounding rectangle in order to allow the application to process mouse input on transformed windows in the 3D coordinate space.

Claim 10: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 9 above, and Horvitz further discloses the new frame region is the bounding rectangle and the bounding rectangle is defined by two adjoining triangles (column 5, lines 1-18).

Claim 11: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 10 above, and Horvitz further discloses:

- a. using the transformation matrix to map the two triangles into transformed space (column 5, lines 1-18);
- b. determining whether the input device point is within one of the two triangles (column 5, lines 1-18).

Claim 12: Horvitz discloses a system and method for redirection of transformed windows, comprising:

- a. desktop window manager operable to transform a window transmitted by the application for display to a transformed window on the display (column 5, lines 1-18);
- b. an external input coupled to the desktop window manager, wherein messages to and from the application pass through the transform interface to and from the

Art Unit: 2178

manager to maintain transparency between the transformed display window and the application (column 5, lines 1-18)

Horvitz does not explicitly disclose a redirection transform application interface coupled to the manager. Miller discloses a similar method and system for redirection of transformed windows that further discloses an application that uses bi-directional mappings of 2D and 3D coordinate spaces and translating manipulations of 3D windows into 2D commands (column 5, lines 58-67/column 6, lines 1-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a redirection transform application interface coupled to the manager in Horvitz. One would have been motivated to include a redirection transform application interface coupled to the manager in order to efficiently translate 3D coordinate selections into 2D coordinates.

Claim 13: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 12 above, and Miller further discloses an input hit testing routine to determine whether an external input message to the manager is associated with a transformed window and perform an inverse transformation on the input if the input is associated with the transformed window before sending the input message to the application (column 5, lines 58-67/column 6, lines 1-36). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an input hit testing routine in Horvitz. One would have been

Art Unit: 2178

motivated to include an input hit test routine in order to receive input commands from the user and to determine when to translate selected 3D coordinates to 2D coordinates.

Claim 14: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 13 above, and Horvitz further discloses:

- a. the external input is a mouse input (column 5, lines 8-18).

Claim 15: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 13 above, and Horvitz further discloses:

- a. the external input is an input message from another application (column 5, lines 8-18).

Claim 16: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 13 above, and Miller further discloses the input hit test routine comprises a speed hit test routine and a full hit test routine in order to timely process the external input message (column 5, lines 58-67/Column 6, lines 1-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a speed hit test routine and a full hit test routine in Horvitz. One would have been motivated to include a speed hit test routine and a full hit test routine for design choice.

Art Unit: 2178

Claim 20: Horvitz and Miller disclose a system and method for redirection of transformed windows as in Claim 17 above, and Horvitz further discloses:

- a. communicating the device message to the application (column 5, lines 1-18).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Miller (US 6,229,542): Method and apparatus for managing windows in three dimensions in a two-dimensional windowing system;
- b. Lupu (US 6,721,950): Input redirection;
- c. Cook et al. (US 6,822,662): User selected display of two-dimensional window in three dimensions on a computer screen.

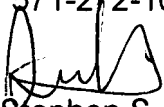
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Abdul-Ali whose telephone number is 571-270-1694. The examiner can normally be reached on Mon-Fri(Alternate Fridays Off) 8:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OAA  
6/13/2007



Stephen S. Hong  
Supervisory Primary Examiner  
Art Unit 2178